1. Formalities

The abstract has been revised to delete the word "comprising," as required in item 2 on page 2 of the Official Action.

Claim 1 has been amended by inserting the –the bottom of– between "plural plates mounted to" and "the bobbin," as required in item 3 on page 2 of the Official Action. Claim 7, which was also objected-to, has been canceled.

2. Non-Statutory Double Patenting Rejection

This rejection has been addressed by amending claim 1 to recite that each of the plural pole plates has a single pole end and single pole face extending therefrom. None of the commonly-assigned Horng patents, including U.S. Patent Nos. 6,441,531 and 6,512,320 discloses, suggests, or claims pole plates with single pole ends and faces as is now recited in claim 1.

3. Rejection of Claims 1, 2, 7, and 8 Under 35 USC §102(b) in view of U.S. Patent No. 4,987,331 (Horng), and Rejection of Claim 3 Under 35 USC §103(a) in view of the Horng Patent

This rejection is respectfully traversed on the grounds that the commonly-assigned Horng patent does not disclose or suggest the feature, now positively recited in independent claim 1, of a stator having plural pole plates, each having just a single pole end and pole face. This arrangement increases the magnetic flux that can be guided to each pole face (since the flux is not divided between multiple poles per plate), while reducing flux leakage (since the overall flux in each plate does not need to be increased to achieve increased flux in each pole). As a result, the invention as claimed provides increased torque, while simplifying the overall pole structure.

Because the Horng patent does not disclose all elements recited in currently-pending claims 1-3 and 12 (which adds the poles faces are staggered so as to be equi-spaced upon assembly), withdrawal of the rejection under 35 USC §102(b) is respectfully requested.

4. Rejection of Claims 4-6 and 9-11 Under 35 USC §103(a) in view of U.S. Patent Nos. 4,987,331 (Horng) and 6,270,325 (Hsieh)

This rejection is respectfully traversed on the grounds that the Hsieh patent, like the Horng patent fails to disclose or suggest a stator having plural pole plates, each having just a single pole end and pole face, as recited in claim 1, from which claims 4-6 and 9-11 depend. Since none of the reference of record discloses the claimed single pole end and single pole face arrangement, withdrawal of the rejection of currently-pending claims 4-6 under 35 USC §103(a) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

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APPENDIX A
(Clean Copy Of Amended Claims)

1. (Amended) A stator comprising:

a bobbin having an axial winding wound therearound;

plural single pole plates each having a single pole end, each said single pole end having a single pole face extending from the pole end;

an axle tube extending through the bobbin and said plural single pole plates, the axle tube conducting magnetic flux created by the winding to said plural single pole plates

a half of said plural single pole plates being stacked and mounted on top of the bobbin and another half of said plural single pole plates being stacked and mounted to a bottom of the bobbin, the number of the half of said plural single pole plates mounted on top of the bobbin being not less than two, the number of the half of said plural single pole plates mounted to the bottom of the bobbin being not less than two, thereby increasing magnetization, reducing magnetic flux leakage, and gaining effectively guided overall magnetic flux by means of increasing an overall thickness for effectively conducting the magnetic flux to said plural single pole plates.

12. (New) The stator as claimed in claim 1, wherein said single pole faces of said single pole plates are staggered when assembled so as to achieve equal spacing between said pole ends.

APPENDIX B
(Marked-Up Copy Of Amended Claims)

1. (Amended) A stator comprising:

a bobbin having an axial winding wound therearound;

plural single pole plates each having a single pole end, each said single pole end having a single pole face extending from the pole end;

an axle tube extending through the bobbin and said plural single pole plates, the axle tube conducting magnetic flux created by the winding to said plural single pole plates

a half of said plural single pole plates being stacked and mounted on top of the bobbin and another half of said plural single pole plates being stacked and mounted to a bottom of the bobbin, the number of the half of said plural single pole plates mounted on top of the bobbin being not less than two, the number of the half of said plural single pole plates mounted to the bottom of the bobbin being not less than two, thereby increasing magnetization, reducing magnetic flux leakage, and gaining [effective] effectively guided overall magnetic flux by means of increasing an overall thickness for effectively conducting the magnetic flux to said plural single pole plates.

APPENDIX C
(Clean Copy Of Amended Abstract)

A stator includes a bobbin, plural pole plates, and an axle tube. Half of the plural pole plates are mounted on top of the bobbin and the other half of the plural pole plates are mounted to a bottom of the bobbin. The axle tube is extended through the pole plates and the bobbin to form a stator having four or eight poles. Each of the pole plates has a single pole end and single pole face extending from the pole end.

APPENDIX D
(Marked-Up Copy Of Amended Abstract)

A stator [comprises] includes a bobbin, plural pole plates, and an axle tube. [A half] Half of the plural pole plates [is] are mounted on top of the bobbin and the other half of the plural pole plates [is] are mounted to a bottom of the bobbin. The axle tube is extended through the pole plates and the bobbin to form a stator having four or eight poles. Each of the pole plates has a single pole end and single pole face extending from the pole end. [The magnetization is increased and the magnetic flux leakage is reduced by means of the increased overall thickness of the pole plates. The effective guided magnetic flux to the respective pole plate is gained. In addition, the radial dimension of the stator is reduced, as each pole plate is provided with the most efficient number of pole face(s) and the overall thickness of the respective pole face is reduced.]